

REMARKS

OVERVIEW

The present amendment is filed in conjunction with a request for continuing examination. This is in response to the Office Action dated May 13, 2003. Claims 1-5 and 15 are pending in this application. Claims 1 and 15 have been amended. The present response is an earnest effort to place all pending claims in proper form for immediate allowance. Reconsideration and passage to issuance are therefore respectfully requested.

ISSUES UNDER 35 U.S.C. § 102

Claims 1 and 3-5 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Copetti et al (US Patent Pub. 2001/7770). Copetti is directed towards a thin film circuit. The thin film circuit can include a resistor. Copetti discloses that tantalum pentoxide can be used as a dielectric and is one of many dielectrics that can be used. In Copetti, the dielectrics are used to separate conductive layers. Therefore, Copetti is clearly directed towards a different type of device. To make clear that the context and advantage of the present invention, claims 1 and 15 have been amended. Claim 1 now requires the limitation of "exposing selected thin film chip resistors to powered moisture conditions" and "observing failures due to electrolytic corrosion under powered moisture conditions in the selected thin film chip resistors." Support for this addition is found in the Specification as originally filed, at least at page 5, last paragraph through page 6, third full paragraph. Copetti is not concerned with the benefit of Applicant's present invention of reducing failures due to electrolytic corrosion under moisture condition by using tantalum pentoxide as a moisture barrier in the resistor. Nor does Copetti disclose the steps of "exposing selected thin film chip resistors to powered moisture conditions" or "observing failures due to electrolytic corrosion under powered moisture conditions in the select thin film chip

resistor." Therefore, it is respectfully submitted that this rejection to claim 1 should be withdrawn. Also, since claims 3-5 depend from claim 1, it is respectfully submitted that these rejections also be withdrawn.

As an additional basis for removing the rejection, claim 1, claim 1 requires an "outer layer of tantalum pentoxide film." In Copetti, the dielectrics serve as separators between resistive layers and therefore would not form "an outer layer." Therefore, it is respectfully submitted that this rejection to claim 1 should be withdrawn on this basis as well.

ISSUES UNDER 35 U.S.C. § 103

Claim 1 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,777,583 to Minami et al. Minami is directed towards a thermal head (Title) and not a chip resistor. As the Examiner recognizes, Minami does not disclose reduction of failures due to electrolytic corrosion under powered moisture conditions (Office Action, page 5, first full paragraph). Therefore, it is respectfully submitted that in the manufacturing process there would be no reason in Minami to ever expose thin film chip resistors to powered moisture conditions for testing, quality control, or other purposes as a part of the manufacturing process. Therefore, it is respectfully submitted that these rejections should be withdrawn and the Examiner should find claim 1 allowable.

Claim 2 has been rejected under 35 U.S.C. § 103(ca) as being unpatentable over Minami et al. as applied to claim 1 and further in view of U.S. Patent No. 4,002,542 to Young. Young is directed towards a capacitor and not a resistor. The tantalum oxide of Young is used as a dielectric in a capacitor not as a moisture barrier in a resistor. The Examiner indicates that it would have been obvious to have modified Minami et al by sputter depositing the tantalum pentoxide film as taught by Young because it allows for depositing a film with reduced electrical

series resistance. The Examiner fails to indicate why anyone skilled in the art designing a chip resistor would have any concern whatsoever with reducing electrical series resistance (ESR), a characteristic associated with a capacitor. In capacitors it would be ideal to eliminate ESR in the insulating dielectric. Minami is directed towards a thermal head having heat-generating resistors—it is not directed towards a capacitor and it is not seen how ESR would be an issue. Therefore, the Examiner's purported motivation is flawed, and further emphasizes that Young and Minami are directed towards very different kinds of devices, in themselves, and certainly different from Applicant's invention. Therefore, this rejection should be withdrawn. (2)

Claims 3-5 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Minami et al as applied to claim 1 above, and further in view of Oki Electric Ind. Co. Ltd. (Japan 52-3196). It is respectfully submitted that for the reasons previously expressed, Minami is deficient with respect to claim 1 and therefore these rejections should also be withdrawn.

Claim 15 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,617,575 to Fuyama et al in view of Sato (Japan 61-27264) and Oki Electric Ind. Co. Ltd. (52-3196). Fuyama et al is also directed towards a thermal head (title) and not a chip resistor. Claim 15 has been amended to further make clear that the claimed invention is directed towards manufacturing chip resistors with improved resistance to electrolytic corrosion under powered moisture conditions. Fuyama makes no mention of providing improved resistance to electrolytic corrosion under powered moisture conditions. Therefore, it is respectfully submitted that claim 15 as amended is in proper form for immediate allowance. (1) (2)

This Amendment accompanies a request for continuing examination. No other fees or extensions of time are believed to be due in connection with this amendment; however, consider

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this a request for any extension inadvertently omitted, and charge any additional fees to deposit

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Reconsideration and allowance is respectfully requested.

Respectfully submitted,

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